

# CW TX-9B

## 9 band CW QRP Transmitter (3 to 30MHz)

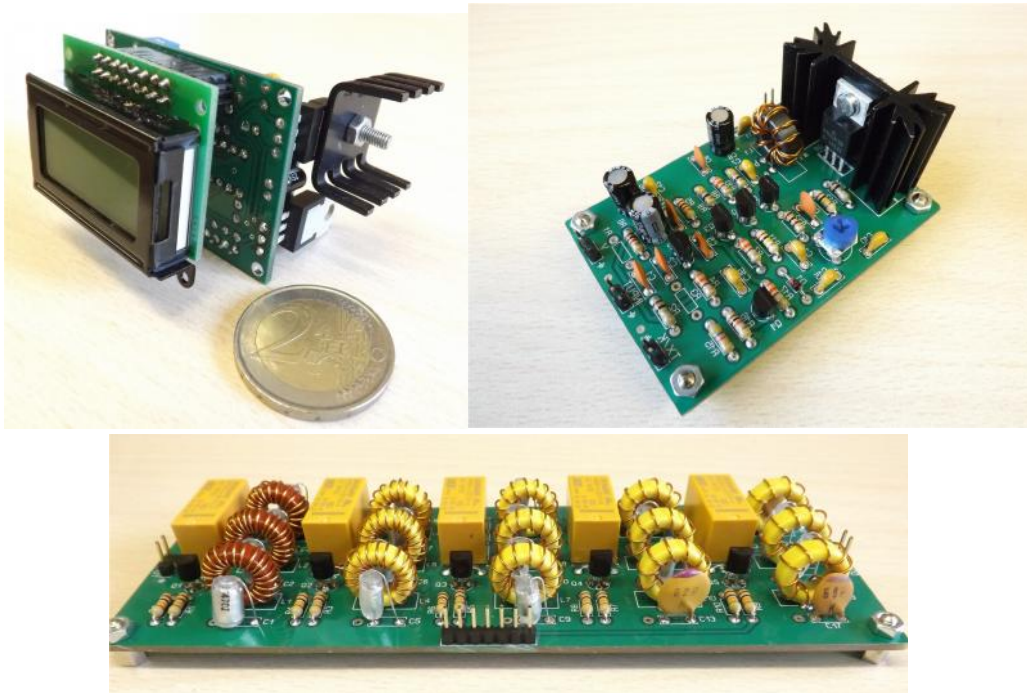
Formed by ILER-DDS + QPA-1 + LPF-9B kits

### Wiring manual

Last updated July 1, 2018

[ea3gcy@gmail.com](mailto:ea3gcy@gmail.com)

Most recent updates and news at: [www.qrphamradiokits.com](http://www.qrphamradiokits.com)



Thanks for constructing the **CW TX-9B** CW QRP transmitter kits

Have fun assembling it and enjoy QRP! 73 Javier Solans, ea3gcy

# SPECIFICATIONS

- Bandwidth: 3 to 30MHz.
- Bands: 80 – 60 – 40 – 30 – 20 – 17 – 15 – 12 -10 meters.
- Output Power: from 2,5W to more than 10W (according to band)
- Supply: 12 to 14V

## PARTS OF CWTX-9B

The "CWTX-9B" is the combination of the RF generator "ILER-DDS", the 3 to 30MHz amplifier "QPA-1" and the 9-band "LPF-9B" low pass filter kits (80 -60-40-30-20-17-15-12-10 meters).

First you must build the three independent kits following the corresponding construction manuals. It is essential to make sure that the ILER-DDS works correctly, and then connect it to the QPA-1 and LPF-9B kits.

Note: there are the CWTX-9B version for 4 bands, called CWTX-4B for 4 bands to choose from 3 to 30MHz.

### ILER-DDS

Use a frequency meter or a quality receiver to check the signal output of the DDS. You must configure the "IF offset" as "IF = 0" so that the frequency shown on the screen will be the one generated in the DDS output. Read the "ILER-DDS" manual carefully to know all its functions.

### QP1-A

The input of the QP1-A has an attenuating network formed by R1, R2 and R3.

As the ILER-DDS Kit based on the AD9850 DDS is used to deliver a low level signal (less than 0dBm), place a 1 resistor in the R2 place and do not place anything in the places of R1 and R3.

### LPF-9B

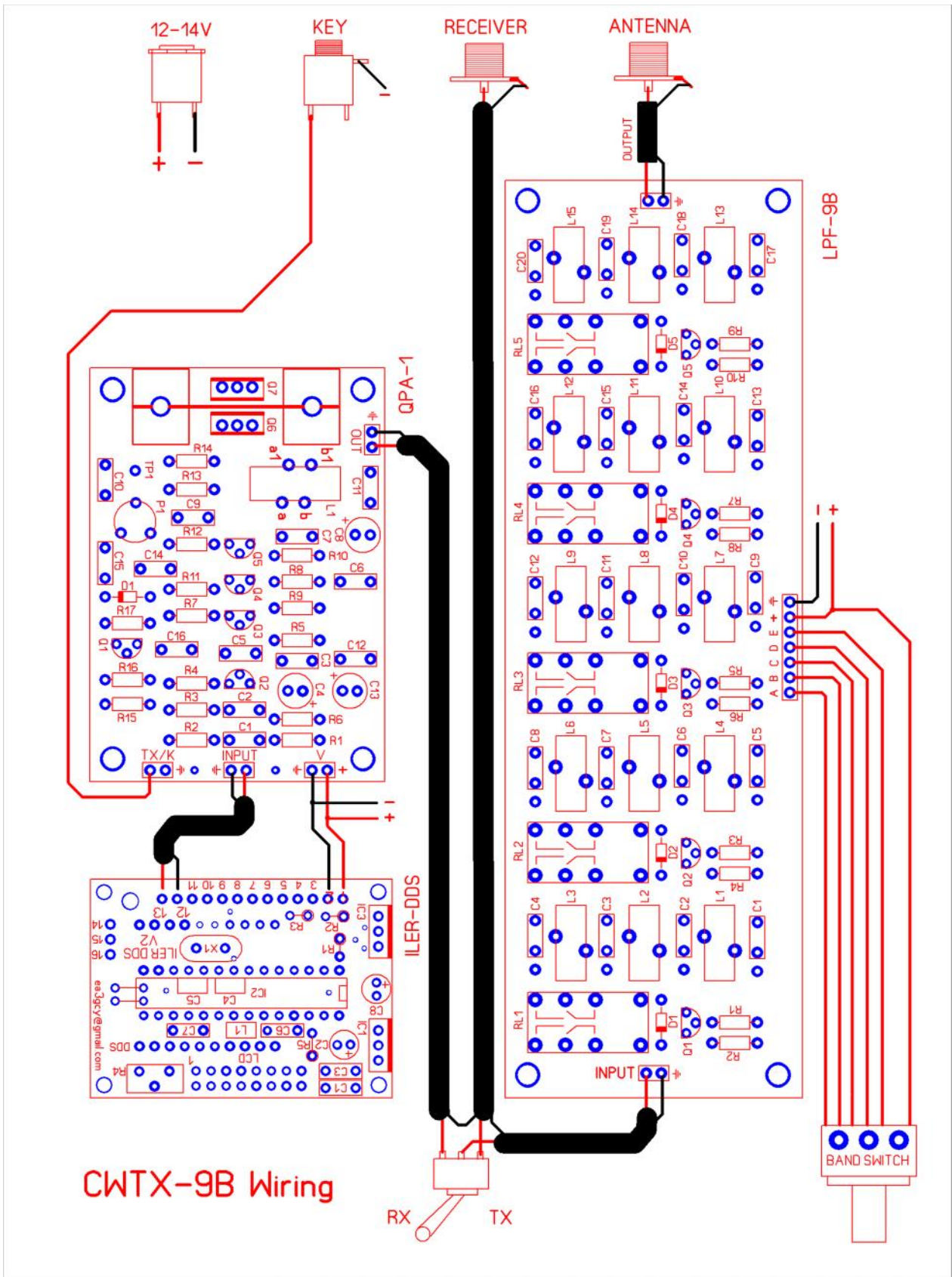
Nothing special about this kit. Simply make sure that you have correctly connected the switch and that the corresponding relays are activated according to the switch position. You must label the commutator control to know which band filter is activated at each moment.

Note that except for the 80-meter filter, the other filters serve two bands at the same time:

60 and 40; 30 and 20; 17 and 15; 12 and 10 meters.

## WIRING, ADJUSTMENTS AND START UP

- 1.- For the installation of these kits use a metal box and for RF signals use 50 ohm thin coaxial cable like the RG-174 or equivalent.
- 2.- For the switching of the LPF-9B bands you will need an 1 circuit 5 positions switch.
- 3.- The 12 to 14V supply is connected to the terminals marked "+" and the "GND" on the boards.
- 4.- The "TX / K" terminals will be connected to the CW key ("KEY" input).



5.- The RX-TX switch is optional if you want to use an associated receiver.

# LIMITED WARRANTY

## Please read carefully BEFORE building your kit

All electronic components and hardware supplied with the kit are under warranty in case of any manufacturing defect for the period of one year after purchase. The warranty does not include the transmitter final amplifier transistor.

The original purchaser has the option of examining the kit and manual for 10 days. If, within this period, the buyer decides not to build the kit, he/she may return the entire unassembled kit at their own expense for the shipping expenses. The shipping expenses and sales commissions (i.e. bank, Ebay, and Paypal commissions) included in the purchase price will not be returned.

Please, BEFORE returning a product, request instructions by email at: [ea3gcy@gmail.com](mailto:ea3gcy@gmail.com)

Javier Solans, EA3GCY, warrants this device to function according to the specifications, provided that it is assembled and adjusted as described in this documentation, and used correctly according to all provided instructions.

It is your responsibility to follow all the instructions in the manual, to identify all the components correctly, and to use good workmanship and proper tools and instruments in the construction and adjustment of this kit.

REMEMBER: This kit will not work as a commercially manufactured product; however, it can often give similar results. Do not expect great performance, BUT YOU ARE SURE TO HAVE LOTS OF FUN!

If you believe that there is a missing component for the kit, please do a thorough inventory of all parts using the parts list in the manual. Check all bags, envelopes and boxes carefully. If needed, you may email me and I will replace any component that you are missing. Even if you can find the exact part locally, please let me know so that we are aware of the problem to help other customers.

I can also supply any part that you have lost, damaged or broken accidentally.

If you find any errors in this manual or would like to make a comment, please do not hesitate to contact me at: [ea3gcy@gmail.com](mailto:ea3gcy@gmail.com)

THANK YOU for building the **QCWTX-8B** KITS PACK.

Enjoy QRP!

73 Javier Solans, EA3GCY